

# List of Activities

## **P** Eucalyptus ochrophloia (Myrtaceae)

### How used

#### Medicinal

\*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Activity	Reference
(-)-Chronotropic	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
<b>Chemicals (2)</b>	
1,8-CINEOLE 87 nl/ml	
BORNEOL 29 ug/ml	
(-)-Inotropic	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
<b>Chemicals (2)</b>	
1,8-CINEOLE 87 nl/ml	
BORNEOL 29 ug/ml	
Acaricide	
<b>Chemicals (3)</b>	
1,8-CINEOLE LC100=6 uM	
GAMMA-TERPINENE	
LIMONENE LC100=8 uM	
ACE-Inhibitor	
<b>Chemicals (3)</b>	
ALPHA-TERPINEOL 100 ug/ml (weak activity)	
GAMMA-TERPINENE 100 ug/ml (weak activity)	
MYRCENE 100 ug/ml	
AChE-Inhibitor	Grundy, D. L. and Still, C. C., Inhibition of acetylcholinesterases by pulegone-1,2-epoxide, Oest. Biochem. & Physiol., 23, 1985, 383-8.
<b>Chemicals (1)</b>	
LIMONENE	
Aldose-Reductase-Inhibitor	Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpenes from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.
<b>Chemicals (4)</b>	
ALPHA-TERPINEOL 100 ug/ml	
DELTA-CADINENE	
GAMMA-TERPINENE 100 ug/ml	
MYRCENE 100 ug/ml	
Allelochemic	
<b>Chemicals (5)</b>	
ALPHA-PINENE	
BORNEOL	
LIMONENE	
TERPINOLENE	
VERBENONE	

Allelopathic

Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.

**Chemicals (3)**

1,8-CINEOLE  
ALPHA-TERPINEOL  
TERPINEN-4-OL

Allergenic

**Chemicals (7)**

1,8-CINEOLE  
ALPHA-PINENE  
BETA-PINENE  
CARVONE  
GERANIOL  
LIMONENE 1/20th carene  
MYRCENE

Analgesic

Martindale's 28th

**Chemicals (3)**

BORNEOL  
MYRCENE  
P-CYMENE

Anesthetic

**Chemicals (1)**

1,8-CINEOLE

Anthelmintic

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

**Chemicals (2)**

1,8-CINEOLE  
GERANIOL

Antiacetylcholine

Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

**Chemicals (1)**

BORNEOL

Antiacetylcholinesterase

**Chemicals (7)**

1,8-CINEOLE IC50=41 ug/ml  
CARVONE IC50=1.4-1.8 mM  
GAMMA-TERPINENE IC23=1.2 mM  
LIMONENE IC22-26=1.2 mM  
P-CYMENE IC40=1.2 mM  
TERPINEN-4-OL IC21-24=1.2 mM  
VIRIDIFLOROL IC50=25 ug/ml

Antiacne

**Chemicals (4)**

ALPHA-PINENE  
ALPHA-TERPINEOL  
DELTA-CADINENE  
TERPINEN-4-OL

Antiadenomic

**Chemicals (1)**

LIMONENE

Antiallergic

**Chemicals (2)**1,8-CINEOLE  
TERPINEN-4-OL

Antialzheimeran?

Grundy, D. L. and Still, C. C., Inhibition of acetylcholinesterases by pulegone-1,2-epoxide, *Oest. Biochem. & Physiol.*, 23, 1985, 383-8.**Chemicals (1)**

LIMONENE

Antianoxic

Yamahara, J., Matsuda, H., Naitoh, Y., Fujimura, H., and Tamai, Y. 1990. Antianoxic Action and Active Constituents of *Atractylodis Lanceae* Rhizoma. *Chem. Pharm. Bull.* 38(7): 2033-2034, 1990.**Chemicals (1)**

BETA-EUDESOL ED60=300 orl mus

Antiasthmatic

**Chemicals (3)**LIMONENE  
PIPERITONE  
TERPINEN-4-OL

Antibacillary

**Chemicals (1)**

P-CYMENE

Antibacterial

**Chemicals (13)**1,8-CINEOLE 50 ppm  
ALPHA-PHELLANDRENE  
ALPHA-PINENE  
ALPHA-TERPINEOL MIC=800-1,600 ug/ml  
BORNEOL MIC=125-250 ug/ml  
DELTA-CADINENE MIC800 ug/ml  
GERANIOL MIC=400 ug/ml  
LIMONENE  
MYRCENE  
NEROL  
P-CYMENE  
SABINENE  
TERPINEN-4-OL

Antibronchitic

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.* Taylor & Frost, London. 791 pp.**Chemicals (2)**1,8-CINEOLE  
BORNEOL

Anticancer

Joseph, J., Nadeau, D. and Underwood, A. 2001. *The Color Code.* Hyperion, NY.**Chemicals (2)**ALPHA-TERPINEOL  
LIMONENE

Anticancer (Cervix)

Medicinal and Poisonous Plants of the Tropics. Leeuwenberg, A.J.M., ed. Pudoc, Wageningen. 1987.

**Chemicals (1)**

BETA-ELEMENE

Anticancer (Pancreas)

**Chemicals (1)**

GERANIOL IC50=265 uM

Anticariogenic

Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against *Streptococcus mutans*. *J. Agric. Food Chem.* 41: 1102-1105.

**Chemicals (4)**

1,8-CINEOLE

ALPHA-TERPINEOL MIC=800-1,600 ug/ml

DELTA-CADINENE MIC800 ug/ml

GERANIOL MIC=400 ug/ml

Anticatarrh

Martindale's 29th

**Chemicals (1)**

1,8-CINEOLE

Anticholinesterase

**Chemicals (1)**

1,8-CINEOLE IC50=50-70

Anticonvulsant

**Chemicals (1)**

MYRCENE

AntiEBV

**Chemicals (1)**

BETA-EUDESMOL

Antiedemic

Shimizu,\*M., et al. 1990. Anti-inflammatory Constituents of Topically Applied Crude Drugs. IV.1) Constituents and Anti-inflammatory Effect of Paraguayan Crude Drug 'Alhucema' (*Lavandula latifolia* Vill.)2). *Chem. Pharm. Bull.* 38(8): 2283-2284, 1990.

**Chemicals (1)**

CARYOPHYLLENE-OXIDE

Antiescherichic

**Chemicals (1)**

BORNEOL MIC=125 ug/ml

Antiesophagitic

**Chemicals (1)**

LIMONENE

Antifatigue

**Chemicals (1)**

1,8-CINEOLE

Antifeedant

**Chemicals (6)**

ALPHA-PINENE  
BORNEOL  
CARYOPHYLLENE-OXIDE  
GAMMA-TERPINENE  
LIMONENE  
TERPINOLENE

Antiflu Economic & Medicinal Plant Research, 5: 195.

**Chemicals (3)**

ALPHA-PINENE  
LIMONENE  
P-CYMENE

Antigliomic

**Chemicals (1)**

BETA-ELEMENE

Antihalitotic American Health, 12(4): 17, 1993.

**Chemicals (1)**

1,8-CINEOLE

Antihelicobacter

**Chemicals (2)**

NEROL  
SABINENE

Antiinflammatory

**Chemicals (7)**

1,8-CINEOLE  
ALPHA-PINENE 500 mg/kg  
ALPHA-TERPINEOL  
BETA-PINENE  
BORNEOL  
CARYOPHYLLENE-OXIDE  
LIMONENE

Antilaryngitic

**Chemicals (1)**

1,8-CINEOLE

Antilithic

**Chemicals (1)**

LIMONENE

Antilymphomic

**Chemicals (1)**

LIMONENE

Antimalarial Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.

**Chemicals (4)**

ALPHA-SELINENE IC50=>50 ug/ml  
BETA-SELINENE IC50=>50 ug/ml  
MYRTENOL IC50=5-50 ug/ml  
TRANS-PINOCARVEOL IC50=5-50 ug/ml

Antimelanomic

**Chemicals (1)**

GERANIOL IC50=150 uM/l

Antimetastatic  
(Stomach)

**Chemicals (1)**

LIMONENE

Antimutagenic

Kauderer, B., Zamith, H., Paumgarten, F.J.R., and Speit, G. Evaluation of the Mutagenicity of B-Myrcene in Mammalian Cells In Vitro. Environmental and Molecular Mutagenesis 18: 28-34, 1991.

**Chemicals (3)**

BETA-EUDESOL ID50=0.09 uM/ml

LIMONENE

MYRCENE

Antinitrosaminic

**Chemicals (2)**

MYRCENE

TERPINOLENE

Antinociceptive

Rao, V.S.N., Menezes, A.M.S., Viana, G.S.B. 1990. Effect of myrcene on nociception in mice. J. Pharm. Pharmacol. 42: 877-878, 1990.

**Chemicals (2)**

1,8-CINEOLE

MYRCENE 10-20 mg/kg ipr mus

Antiobesity

**Chemicals (1)**

LIMONENE

Antiotitic

**Chemicals (1)**

BORNEOL

Antioxidant

Jim Duke's personal files.

**Chemicals (4)**

GAMMA-TERPINENE

MYRCENE

TERPINEN-4-OL

TERPINOLENE

Antipeptic

Chem & Pharm. Bull., 34: 3854, 1986.

**Chemicals (1)**

BETA-EUDESOL

Antipharyngitic

**Chemicals (1)**

1,8-CINEOLE

Antiplatelet

**Chemicals (1)**

1,8-CINEOLE

Antiplasmodial

Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp.

**Chemicals (4)**

ALPHA-SELINENE IC50=>50 ug/ml  
BETA-SELINENE IC50=>50 ug/ml  
MYRTENOL IC50=5-50 ug/ml  
TRANS-PINOCARVEOL IC50=5-50 ug/ml

Antipneumonic

**Chemicals (1)**

ALPHA-PINENE

Antiproliferant

**Chemicals (2)**

ALPHA-TERPINEOL  
BETA-ELEMENE

Antiproliferative

**Chemicals (1)**

CARVONE

Antipyretic

**Chemicals (1)**

BORNEOL

Antirheumatalgic

Martindale's 28th

**Chemicals (1)**

P-CYMENE

Antirheumatic

**Chemicals (1)**

1,8-CINEOLE

Antirhinitic

**Chemicals (1)**

1,8-CINEOLE

Antisalmonella

**Chemicals (3)**

BETA-EUDESOL >0.18 uM/ml  
BORNEOL MIC=125 ug/ml  
GERANIOL MIC=400 ug/ml

Antiseptic

**Chemicals (11)**

1,8-CINEOLE  
ALPHA-PINENE  
ALPHA-TERPINEOL  
AROMADENDRENE  
BETA-PINENE  
CARVONE 1.5 x phenol  
GERANIOL 7 x phenol  
LIMONENE  
NEROL  
SABINENE  
TERPINEN-4-OL

Antisusititic

**Chemicals (1)**

1,8-CINEOLE

Antispasmodic

**Chemicals (8)**

1,8-CINEOLE

ALPHA-PINENE

BETA-PINENE

BORNEOL ED50=0.008 mg/ml

GERANIOL

LIMONENE ED50=0.197 mg/ml

MYRCENE

TERPINEN-4-OL

Antistaphylococcic

**Chemicals (4)**

1,8-CINEOLE 50 ppm

ALPHA-PHELLANDRENE

ALPHA-PINENE

BORNEOL MIC=250 ug/ml

Antistreptococcic

**Chemicals (1)**

DELTA-CADINENE

Antitubercular

**Chemicals (1)**

GERANIOL MIC=64 ug/ml

Antitumor

**Chemicals (3)**

CARYOPHYLLENE-OXIDE

GERANIOL

LIMONENE

Antitumor (Breast)

**Chemicals (1)**

LIMONENE

Antitumor (Cervix)

Medicinal and Poisonous Plants of the Tropics. Leeuwenberg, A.J.M., ed. Pudoc, Wageningen. 1987.

**Chemicals (1)**

BETA-ELEMENE

Antitumor (Colon)

**Chemicals (1)**

LIMONENE

Antitumor (Pancreas)

**Chemicals (2)**

GERANIOL IC50=265 uM

LIMONENE

Antitumor (Prostate)

**Chemicals (1)**

LIMONENE

Antitumor (Stomach)

**Chemicals (1)**

LIMONENE

Antitumor-Promoter?

**Chemicals (1)**

BETA-EUDESOL

Antitussive

**Chemicals (2)**

1,8-CINEOLE

TERPINEN-4-OL

Antiulcer

**Chemicals (5)**

1,8-CINEOLE

BETA-EUDESOL

NEROL

SABINENE

TERPINEN-4-OL

Antiviral

**Chemicals (3)**

ALPHA-PINENE

LIMONENE

P-CYMENE

Antiyeast

**Chemicals (1)**

BORNEOL MIC=250 ug/ml

Apoptotic

**Chemicals (2)**

BETA-ELEMENE

LIMONENE

Ascaricide

Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.

**Chemicals (1)**

GERANIOL

Bacteriostatic

Chin. J. Tuber. Respir. Dis.

**Chemicals (1)**

TERPINEN-4-OL

Bronchoprotectant

**Chemicals (1)**

LIMONENE

Calcium-Antagonist

**Chemicals (2)**

BETA-EUDESOL 40 uM mus

CARYOPHYLLENE-OXIDE ED50=32 uM gpg

Cancer-Preventive

Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

**Chemicals (5)**

ALPHA-PINENE  
AROMADENDRENE  
CARVONE  
GERANIOL  
LIMONENE

## Candidicide

**Chemicals (4)**

1,8-CINEOLE  
BETA-PINENE  
BORNEOL MIC=250 ug/ml  
GERANIOL

## Candidistat

**Chemicals (2)**

CARVONE  
LIMONENE

## Carcinogenic

Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.

**Chemicals (1)**

1,8-CINEOLE

## Carminative

Yamamoto, A., Umemori, S., and Muranishi, S. 1993. Absorption Enhancement of Intrapulmonary Administered Insulin by Various Absorption Enhancers and Protease Inhibitors in Rats. *J. Pharm. Pharmacol.* 46: 14-18, 1994.

**Chemicals (1)**

CARVONE

## Chemopreventive

**Chemicals (2)**

LIMONENE  
MYRCENE

## Choleretic

**Chemicals (2)**

1,8-CINEOLE  
BORNEOL

## Cholesterolytic

**Chemicals (1)**

LIMONENE

## Cicatrizant

**Chemicals (1)**

ALPHA-TERPINEOL ED50=240 ug/g mus

## CNS-Inhibitor

**Chemicals (1)**

BETA-EUDESMOL

## CNS-Stimulant

List, P.H. and Horhammer, L., *Hager's Handbuch der Pharmazeutischen Praxis*, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

**Chemicals (4)**

1,8-CINEOLE  
BORNEOL  
CARVONE  
GERANIOL

CNS-Toxic      Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

**Chemicals (1)**

BORNEOL

Coleopterifuge

**Chemicals (1)**

VERBENONE

Coleoptophile

**Chemicals (1)**

ALPHA-PINENE

Convulsant

**Chemicals (1)**

1,8-CINEOLE

Counterirritant      Martindale's 29th

**Chemicals (1)**

1,8-CINEOLE

Cytochrome-P450-  
Inducer

**Chemicals (2)**

1,8-CINEOLE  
DELTA-CADINENE

Decongestant

**Chemicals (1)**

1,8-CINEOLE

Degranulant

**Chemicals (1)**

1,8-CINEOLE 0.3 ul/ml

Dentifrice      Martindale's 29th

**Chemicals (1)**

1,8-CINEOLE

Deodorant      Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

**Chemicals (1)**

TERPINOLENE

Dermal      Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

**Chemicals (1)**

ALPHA-PHELLANDRENE

Detoxicant

**Chemicals (1)**

LIMONENE

Diuretic

**Chemicals (1)**

TERPINEN-4-OL 0.1 ml/rat

Edemagenic

**Chemicals (1)**

1,8-CINEOLE inj

Embryotoxic

**Chemicals (1)**

GERANIOL

Emetic

Lawrence Review of Natural Products, Sep-97.

**Chemicals (2)**

ALPHA-PHELLANDRENE

GERANIOL 3 x ipecac

Enterocontractant

J. Aromatherapy 4: 22.

**Chemicals (1)**

LIMONENE

Estrogenic

**Chemicals (1)**

NEROL

Expectorant

Michael Castleman 1991. The Healing Herbs. Rodale Press, Emmaus, PA 436 pp.

**Chemicals (5)**

1,8-CINEOLE

ALPHA-PINENE

BETA-PHELLANDRENE

GERANIOL

LIMONENE

FLavor

Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry

**Chemicals (15)**

1,8-CINEOLE FEMA 1-200

ALPHA-PHELLANDRENE FEMA 10-130

ALPHA-PINENE FEMA 15-150

ALPHA-TERPINEOL FEMA 5-40

BETA-PINENE FEMA 15-600

BORNEOL FEMA&lt;1

CARVONE FEMA 80-3,000

GAMMA-TERPINENE FEMA 1-40

GERANIOL FEMA 1-10

LIMONENE

MYRCENE FEMA 0.5-9

NEROL FEMA 1-20

P-CYMENE FEMA 12-250

PIPERITONE FEMA 1-2

TERPINOLENE FEMA 15-60

Fungicide

Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.

**Chemicals (10)**

1,8-CINEOLE  
ALPHA-PHELLANDRENE  
BETA-PHELLANDRENE  
BORNEOL  
CARYOPHYLLENE-OXIDE  
GERANIOL IC93=2 mM  
MYRCENE  
P-CYMENE  
TERPINEN-4-OL  
TERPINOLENE

Fungiphilic

J. Agric. Food Chem. 43: 2283.

**Chemicals (1)**

LIMONENE

Fungistat

**Chemicals (2)**

CARVONE  
LIMONENE

Gastroprotective

**Chemicals (1)**

1,8-CINEOLE

Gram(+)icide

**Chemicals (1)**

1,8-CINEOLE

Gram(-)icide

**Chemicals (1)**

1,8-CINEOLE

GST-Inducer

**Chemicals (1)**

LIMONENE

Hepatoprotective

**Chemicals (2)**

BETA-EUDES MOL  
BORNEOL

Hepatotonic

**Chemicals (1)**

1,8-CINEOLE

Herbicide

Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.

**Chemicals (9)**

1,8-CINEOLE IC50=78 uM  
ALPHA-PINENE IC50=30 uM  
BETA-PINENE  
BORNEOL IC50=470 mM  
GERANIOL IC100-2,000 uM  
LIMONENE IC50=45 uM  
P-CYMENE IC50=50 uM  
PIPERITONE IC50=30 mM  
TERPINEN-4-OL IC50=200 mM

Histaminic

**Chemicals (1)**

LIMONENE

Hypotensive

**Chemicals (1)**

1,8-CINEOLE

Hypothermic

**Chemicals (1)**

MYRCENE

Immunomodulator

**Chemicals (1)**

LIMONENE

Inflammatory

**Chemicals (1)**

1,8-CINEOLE inj

Inhalant

Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.* Taylor & Frost, London. 791 pp.

**Chemicals (1)**

BORNEOL

Insect-Repellent

**Chemicals (1)**

BORNEOL

Insecticide

Bettarini, F., Borgonovi, G.E., et al. 1991. Antiparasitic Compounds from East African Plants: Isolation and Biological Activity of Anonaine, Matricarianol, Canthin-6-One and Caryophyllene Oxide. *Insect Sci. Applic.* 14(1): 93-99, 1993.

**Chemicals (5)**

ALPHA-PINENE 0.82 uM/fly  
ALPHA-TERPINEOL 1.29 uM/fly  
CARVONE  
CARYOPHYLLENE-OXIDE  
LIMONENE 0.37 uM/fly

Insectifuge

Jacobson, M., *Glossary of Plant-Derived Insect Deterrents*, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

**Chemicals (13)**

1,8-CINEOLE  
ALPHA-PINENE 50 ppm  
BETA-PINENE  
BORNEOL  
CARVONE  
GAMMA-TERPINENE  
GERANIOL 50 ppm  
LIMONENE  
MYRCENE  
P-CYMENE  
PIPERITONE (> DEET)  
TERPINEN-4-OL  
VERBENONE

Insectiphile J. Stored. Prod. Res., 22:141, 1986.

**Chemicals (3)**

ALPHA-PHELLANDRENE  
ALPHA-PINENE  
GERANIOL

Interleukin-6-Inhibitor

**Chemicals (2)**

ALPHA-TERPINEOL  
LIMONENE

Irritant Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

**Chemicals (10)**

1,8-CINEOLE  
ALPHA-PHELLANDRENE  
ALPHA-PINENE  
BETA-PINENE  
BORNEOL  
GAMMA-TERPINENE  
LIMONENE  
MYRCENE  
P-CYMENE  
TERPINEN-4-OL

Laxative

**Chemicals (2)**

ALPHA-PHELLANDRENE  
P-CYMENE

Lipolytic

**Chemicals (1)**

LIMONENE

Mosquitofuge

**Chemicals (1)**

ALPHA-TERPINEOL > Deet

Motor-Depressant Buchbauer et al, e.g. Buchbauer et al, 1993. Therapeutic properties of essential oils and fragrances. Chap.12 in Teranishi, R., Buttery, R.G and Sugisawa, H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC

**Chemicals (2)**

ALPHA-TERPINEOL  
CARVONE

Mycobactericide

**Chemicals (1)**

GERANIOL MIC=64 ug/ml

Myorelaxant

**Chemicals (4)**

1,8-CINEOLE  
BORNEOL  
LIMONENE 50 mg/kg  
MYRCENE 100-200 mg/kg

Nematicide

Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.

**Chemicals (7)**

1,8-CINEOLE  
ALPHA-TERPINEOL MLC=1 mg/ml  
BORNEOL MLC=1 mg/ml  
CARVONE MLC=1 mg/ml  
GERANIOL IC86=100 ug/ml  
LIMONENE IC=100 ug/ml  
TERPINEN-4-OL MLC=1 mg/ml

Neurogenic

**Chemicals (1)**

BETA-EUDESOL

Neurotoxic

**Chemicals (1)**

1,8-CINEOLE

NO-Genic

**Chemicals (1)**

LIMONENE

Ornithine-  
Decarboxylase-Inhibitor

**Chemicals (1)**

LIMONENE ~750 mg/kg (diet)

Ozone-Scavenger

**Chemicals (1)**

LIMONENE

P450-2B1-Inhibitor

**Chemicals (2)**

ALPHA-PINENE IC50=0.087 uM  
MYRCENE IC50=0.14 uM

P450-Inducer

**Chemicals (3)**

1,8-CINEOLE  
DELTA-CADINENE  
LIMONENE

Pediculicide

**Chemicals (1)**

1,8-CINEOLE 2.3 x pyrethrin

Perfume Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

**Chemicals (1)**

1,8-CINEOLE

Perfumery Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

**Chemicals (18)**

ALPHA-PHELLANDRENE  
ALPHA-PINENE  
ALPHA-SELINENE  
ALPHA-TERPINEOL  
BETA-PHELLANDRENE  
BETA-PINENE  
BETA-SELINENE  
BORNEOL  
CARVONE  
GAMMA-TERPINENE  
GERANIOL  
MYRCENE  
NEROL  
PINOCARVONE  
PIPERITONE  
SABINENE  
TERPINOLENE  
VERBENONE

Peristaltic

**Chemicals (1)**

LIMONENE

Pesticide

**Chemicals (21)**

1,8-CINEOLE  
ALPHA-PHELLANDRENE  
ALPHA-PINENE  
ALPHA-TERPINEOL  
AROMADENDRENE  
BETA-EUDESOL  
BETA-PINENE  
BORNEOL  
CARVONE  
CARYOPHYLLENE-OXIDE  
DELTA-CADINENE  
GAMMA-TERPINENE  
GERANIOL  
LIMONENE  
MYRCENE  
NEROL  
P-CYMENE  
PIPERITONE  
TERPINEN-4-OL  
TERPINOLENE  
VERBENONE

Photosensitizer Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.

**Chemicals (1)**

LIMONENE

Renoirritant                      Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

**Chemicals (1)**

TERPINEN-4-OL

Rubefacient                      Martindale's 29th

**Chemicals (1)**

1,8-CINEOLE

Secretogogue

**Chemicals (1)**

1,8-CINEOLE

Sedative

**Chemicals (10)**

1,8-CINEOLE  
ALPHA-PINENE  
ALPHA-TERPINEOL  
BETA-EUDESOL  
BORNEOL  
CARVONE  
GERANIOL  
LIMONENE ED=1-32 mg/kg  
NEROL  
P-CYMENE

Spasmogenic

**Chemicals (3)**

1,8-CINEOLE  
ALPHA-PINENE  
BETA-PINENE

Spermicide

**Chemicals (1)**

TERPINEN-4-OL ED100=0.015

Surfactant

**Chemicals (1)**

1,8-CINEOLE

Termiticide                      Material und Organismen , 24: 1, 1989.

**Chemicals (2)**

ALPHA-TERPINEOL IC100=5 mg/g  
DELTA-CADINOL

Testosterone-  
Hydroxylase-Inducer

**Chemicals (1)**

1,8-CINEOLE

Testosterone-Inducer

**Chemicals (1)**

DELTA-CADINENE

Tranquilizer Lawrence Review of Natural Products, Jun-90.

**Chemicals (2)**ALPHA-PINENE  
BORNEOL

Transdermal

**Chemicals (5)**1,8-CINEOLE  
ALPHA-PINENE  
ALPHA-TERPINEOL  
BETA-PINENE  
LIMONENE

Trichomonicide

**Chemicals (5)**1,8-CINEOLE LD100=1,000 ug/ml  
CARVONE LD100=300 ug/ml  
GERANIOL LD100=300 ug/ml  
NEROL ED100=300 ug/ml  
P-CYMENE LD100=50 ug/ml

Vermicide

**Chemicals (1)**

CARVONE

Vulnerary Lawrence Review of Natural Products, Jan-91.

**Chemicals (2)**ALPHA-TERPINEOL ED50=240 ug/g mus  
TERPINEN-4-OL